CLAIMS

This listing of Claims will replace all prior versions, and listings, of claims in the application:

Please amend the Claims as follows:

1. (Currently Amended) A receiver section for a spread spectrum communication system ~~incorporating a receiver section~~, the receiver section comprising:

a plurality of processing units, at least one of the plurality of processing units including a plurality of configurable correlator resources, wherein at least one of the plurality of configurable correlator resources is configurable to ~~provide~~ perform a plurality of correlation functions;

a signal acquisition section, the signal acquisition section coupled to receive analog communication signals, the signal acquisition section outputting sampled signals corresponding to a plurality of multipath components, the plurality of processing units receiving data signals and performing correlation functions on the data signals;

a controller, coupled to the plurality of processing units over a control signal path, the controller outputting configuration information to the plurality of processing units to configure the plurality of processing units.

2. (Currently Amended) The receiver section of claim 1, wherein the controller outputs the configuration information to define a configuration for the at least one of the plurality of processing units and the at least one processing units maintains that configuration until the controller outputs a new set of configuration information.

3. (Original) The receiver section of claim 2, wherein the configuration information includes information as to whether each of the plurality of processing units is powered or is powered down.

4. (Currently Amended) The receiver section of claim 1, wherein ~~the processing units each comprise a plurality of configurable correlator resources,~~the at least one of the plurality of configurable correlator resources ~~configurable~~ performs a first correlator function ~~in~~ when the ~~response to the~~ configuration information requires the at least one configurable correlator resource to perform the first correlator function, and wherein the at least one configurable correlator resource peforms a second correlator function when the configuration information requires the at least one configurable correlator resource to perform the second correlator function.

5. (Canceled).

6. (Currently Amended) The receiver section of claim 4, wherein the controller outputs the configuration information to define a configuration of the at least one of the plurality of processing units and the at least one of the plurality of configurable resources ~~within the processing units~~, the at least one processing units and the at least one of the plurality of configurable resources ~~within the processing units~~ maintaining that configuration until the controller outputs a new set of configuration information.

7. (Original) The receiver section of claim 6, wherein the configuration information is in the form of a configuration word.

Claims 8-11. (Canceled).

12. (Currently Amended) The receiver section of claim 1, wherein ~~the processing units each comprise a plurality of configurable correlator resources, the plurality of configurable correlator resources configurable in response to the configuration information to assume~~ the plurality of correlation functions include a timing function, a pilot function and~~or~~ a data function.

13. (Currently Amended) The receiver section of claim 12, wherein the controller generates the configuration information in response to a change in received multipath signals.

14. (Currently Amended) The receiver section of claim 12, wherein, for each of the multipath components tracked by the receiver section, the configuration of the at least one of the processing units configures at least three of the plurality of configurable correlator resources within the at least one of the processing units, one of which correlator resources assumes the timing function, one of which correlator resources assumes the pilot function and one of which correlator resources assumes the data function.

15. (Currently Amended) The receiver section of claim 1, wherein ~~the processing units each comprise a plurality of configurable correlator resources,~~, during a first time period, the at least one of the plurality of configurable correlator resources is configurable in response to

the configuration information to assume a timing function, a pilot function or a data function, ~~ones~~ and wherein another of the plurality of configurable correlator resources ~~that do~~does not assume a timing function, a pilot function or a data function ~~being~~ and is powered down.

16. (Currently Amended) The receiver section of claim ~~10~~ 1, further comprising:

an interpolator coupled to the signal acquisition section and receiving a sampled data stream, the interpolator generating an interpolated data stream including data derived from the sampled data stream; and

a timing selection circuit identifying one of the values of the interpolated data stream as a representative data sample.

17. (Original) The receiver section of claim 16, wherein the signal acquisition section comprises an analog to digital converter that generates the sampled data stream, wherein the analog to digital converter is free running.

18. (Original) The receiver section of claim 17, further comprising a frequency correction circuit coupled to the interpolator and coupled to adjust a digital frequency outside of the signal acquisition section.

19. (Original) The receiver section of claim 16, further comprising a frequency correction circuit coupled to the interpolator and coupled to a multiplier, the multiplier receiving

a digital signal and outputting the sampled data stream derotated by a signal responsive to a signal generated by the frequency correction circuit.

20. (Original) The receiver section of claim 16, wherein the interpolated data stream includes the sampled data stream and additional data points representing intervals between sampling times of the sampled data stream.

21. (Currently Amended) The receiver section of claim 16, wherein the timing selection circuit is within one of the plurality of ~~a~~ processing units.

22. (Currently Amended) The receiver section of claim ~~10~~ 1, further comprising:

an interpolator coupled to the signal acquisition section and receiving a sampled data stream, the interpolator generating an interpolated data stream including data derived from the sampled data stream; and

a data bus receiving the interpolated data stream from the interpolator and providing the interpolated data stream to at least one of the plurality of processing units.

23. (Currently Amended) The receiver section of claim 22, further comprising a control bus distinct from the data bus, the controller coupled to the at least one of the plurality of processing units by the control bus so that the configuration information passes over the control bus.

24. (Original) The receiver section of claim 1, wherein the receiver section is in a base station.

25. (Original) The receiver section of claim 1, wherein the receiver section is in a mobile handset.

26. (Original) The receiver section of claim 1, wherein the receiver section is coupled to a single antenna.

27. (Original) The receiver section of claim 1, wherein the receiver section is coupled to plural antennas.

Claims 28-37. (Canceled.)

38. (New) The receiver section of Claim 1, wherein the plurality of processing units includes first and second processing units, the plurality of configurable correlator resources includes first and second configurable correlator resources, and the plurality of correlation functions includes first and second correlation functions, the first configurable correlator resource being in the first processing unit and the second configurable correlator resource being in the second processing unit, wherein the first correlator resource is configured to perform the first correlation function and the second correlator resource is configured to perform the second correlation function, wherein the first and second correlator resources perform the first and second functions on a first multipath.

39. (New) The receiver section of Claim 1, wherein the plurality of configurable correlator resrouces includes first, second, third, fourth and fifth configurable correlator resources, wherein, when a transmitter transmits a first signal defined by three scrambling codes to the receiver section, the third, fourth and fifth configurable correlator resources are configured to perform data channel functions, and wherein, when the transmitter transmits a second signal defined by two scrambling codes to the receiver section, the third and fourth configurable correlator resources are configured to perform data channel functions and the fifth configurable correlator resource is powered down.

40. (New) The receiver section of Claim 1, wherein the at least one configurable correlator resource performs a first correlation function during a first time period and performs a second correlation function during a second time period.

41. (New) The receiver section of Claim 1, wherein the plurality of configurable correlator resources include first and second configurable correlator resources, the first correlator resource being powered down and the second correlator resource being powered on during a first time period.

42. (New) The receiver section of Claim 41, wherein the configuration information instructs the first correlator resource to be powered down and the second correlator resource to be powered on during the first time period.

43. (New) A receiver section for a spread spectrum communication system, the receiver section comprising:

a plurality of processing units, at least one of the plurality of processing units configurable to provide a plurality of correlation functions, the plurality of processing units includes a plurality of configurable correlator resources, the plurality of configurable correlator resources configurable in response to configuration information to assume one of the plurality of correlation functions, the plurality of correlation functions including a timing function, a pilot function, and a data function;

a signal acquisition section, the signal acquisition section configured to receive analog communication signals, the signal acquisition section outputting sampled signals corresponding to a plurality of multipath components, the plurality of processing units receiving data signals and performing correlation functions on the data signals;

a controller, coupled to the processing units over a control signal path, the controller outputting the configuration information to the plurality of processing units to configure the plurality of processing units; wherein, for each of the multipath components traced by the receiver section, the configuration of the processing units configures at least three of the plurality of configurable correlator resources, one of which assumes the timing function, one of which assumes the pilot function and one of which assumes the data function.

44. (New) The receiver section of Claim 43, wherein the configuration information includes information as to whether each of the plurality of processing units is powered or is powered down.

45. (New) The receiver section of Claim 43, wherein the configuration information determines whether one or more of the plurality of configurable resources is powered up or powered down.

46. (New) The receiver section of Claim 43, wherein a first of the plurality of configurable correlator resources is powered up and a second of the configurable correlator resources is powered down.

47. (New) The receiver section of claim 43, further comprising:

an interpolator coupled to the signal acquisition section and receiving a sampled data stream, the interpolator generating an interpolated data stream including data derived from the sampled data stream; and

a timing selection circuit identifying one of the values of the interpolated data stream as a representative data sample.

48. (New) A receiver section for a spread spectrum communication system, the receiver section comprising:

a plurality of processing units, each of the plurality of processing units configurable to provide a plurality of correlation functions and including a plurality of configurable correlator resources, the plurality of configurable correlator resources configurable in response to configuration information to assume a function selected from the group of early/late timing correlator, pilot correlator, and data channel correlator;

a signal acquisition section, the signal acquisition section configured to receive analog communication signals, the signal acquisition section outputting sampled signals corresponding to a plurality of multipath components, the plurality of processing units receiving data signals and performing correlation functions on the data signals;

a controller, coupled to the processing units over a control signal path, the controller outputting the configuration information to the plurality of processing units to configure the plurality of processing units;

an interpolator coupled to the signal acquisition section and receiving a sampled data stream, the interpolator generating an interpolated data stream including data derived from the sampled data stream; and

a timing selection circuit identifying one of the values of the interpolated data stream as a representative data sample, the timing selection circuit being positioned within one of the plurality of processing units.

49. (New) The receiver section of Claim 48, wherein the configuration information includes information as to whether each of the plurality of processing units is powered or is powered down.

50. (New) The receiver section of Claim 48, wherein a first of the plurality of configurable correlator resources is powered up and a second of the configurable correlator resources is powered down.

51. (New) A receiver section for a spread spectrum communication system, the receiver section comprising:

a plurality of processing units, at least one of the plurality of processing units including first and second correlator resources, each correlator resource configured to perform at least one correlation function;

a signal acquisition section, the signal acquisition section configured to receive analog communication signals, the signal acquisition section outputting sampled signals corresponding to a plurality of multipath components, the plurality of processing units receiving data signals and performing correlation functions on the data signals;

a controller, coupled to the processing units over a control signal path, the controller outputting configuration information to the plurality of processing units to configure the plurality of processing units; wherein the first correlator resource is powered down during a first time period and the second correlator resource is powered on during the first time period.

52. (New) The receiver section of Claim 51, wherein the first and second correlator resources are each configurable to perform a plurality of correlation functions.